Title: SURGICAL CUTTING AND STAPLING DEVICE

Abstract: The present invention, in accordance with various embodiments thereof, relates to a surgical device for at least one of cutting and stapling a section of tissue. The surgical device includes a housing including at least two drivers. The surgical device also includes an anvil mechanically attachable to the housing and moveable relative to the housing between an open position and a closed position. The first driver operates to move the anvil relative to the housing to an intermediate position between the open position and the closed position. The second driver operates to move at least a portion of the housing relative to the anvil between the intermediate position and the closed position.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/05530

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : A61B 17/04
US CL : 227/19, 175.1, 178.1
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 227/19, 175.1, 178.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 6,119,913 A (ADAMS et al.) 19 September 2000 (19.09.2000), figures 1, 2 and 3, column 6 lines 21-25, column 7 lines 14-21, column 8 lines 16-19.</td>
<td>1-10 and 70-78</td>
</tr>
<tr>
<td>A</td>
<td>US 6,264,087 A (WHITMAN) 24 July 2001 (24.07.2001)</td>
<td>1-10 and 70-78</td>
</tr>
<tr>
<td>A</td>
<td>US 6,443,973 B1 (WHITMAN) 3 September 2002 (03.09.2002)</td>
<td>1-10 and 70-78</td>
</tr>
</tbody>
</table>

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance

“E” earlier application or patent published on or after the international filing date

“L” document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reasons (as specified)

“O” document referring to an oral disclosure, use, exhibition or other means

“P” document published prior to the international filing date but later than the priority data claimed

“T” late document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

“&” document member of the same patent family

Date of the actual completion of the international search
05 January 2006 (05.01.2006)

Date of mailing of the international search report
MAR 2006

Name and mailing address of the ISA/US
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Form PCT/ISA/210 (second sheet) (April 2005)
INTERNATIONAL SEARCH REPORT

Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  [ ] Claims Nos.:
    because they relate to subject matter not required to be searched by this Authority, namely:

2.  [ ] Claims Nos.:
    because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3.  [ ] Claims Nos.:
    because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III  Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1.  [ ] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2.  [ ] As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.

3.  [ ] As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4.  [x] No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-10

Remark on Protest  [ ] The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee.

[ ] The additional search fees were accompanied by the applicant’s protest but the applicable protest fee was not paid within the time limit specified in the invitation.

[ ] No protest accompanied the payment of additional search fees.

Form PCT/ISA/210  (continuation of first sheet(2)) (April 2005)
BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

I. Claims 1-10 & 70-78, drawn to a surgical device having an axially lockable anvil and method of use
II. Claims 11-20 & 79-87, drawn to a surgical device having a stapler pusher shear pin and method of use
III. Claims 21-27, drawn to a surgical device having a cutting element shear pin
IV. Claims 28-40, drawn to a surgical device having a specific stapler cartridge
V. Claims 41-50, drawn to a surgical device having an interference element
VI. Claims 51-60, drawn to a surgical device having a rotatable pusher element
VII. Claims 61-69, drawn to a surgical device sleeve
VIII. Claims 88-98, drawn to a surgical device having a trocar shaft and a cable extension element.
IX. Claims 99-105, drawn to a surgical device having a trocar shaft and an anvil sleeve

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group I requires at least two drives, an axially lockable anvil, and a controller, the sum of which are not required by the surgical device of Group II.

The inventions listed as Groups I and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group I requires at least two drives, an axially lockable anvil and a controller, the sum of which are not required by the surgical device of Group III.

The inventions listed as Groups II and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group II requires a shear pin to connect the stapler housing to the stapler pusher, as well as a plurality of pusher fingers, the sum of which are not required by the surgical device of Group III.

The inventions listed as Groups I and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group IV requires a staple cartridge defining openings and staple guides arranged in two radially-spaced rows, the sum of which are not required by the surgical device of Group IV.

The inventions listed as Groups I and V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group IV requires an interference element and an axially lockable staple cartridge, the sum of which are not required by the surgical device of Group I.

The inventions listed as Groups I and VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group VI
requires a rotatable pusher element including a cam element and a rotatable member, the sum of which are not required by the surgical device of Group I.

The inventions listed as Groups I and VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group VI requires a sleeve and a closure element, the sum of which are not required by the surgical device of Group I.

The inventions listed as Groups I and VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group VI requires a trocar shaft and a cable extension element, the sum of which are not required by the surgical device of Group I.

The inventions listed as Groups I and IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The surgical device of Group VI requires a trocar shaft and an anvil sleeve, the sum of which are not required by the surgical device of Group I.